# **National Nuclear Security Administration**

# **Appropriation and Program Summary Tables Outyear Appropriation Summary Tables**

#### **FY 2012 BUDGET TABLES**

**National Nuclear Security Administration** 

#### Overview Appropriation Summary

		PP- op-	idilon Sui					
	(dollars in thousands)							
	FY 2010 Actual	FY 2011	FY 2011	FY 2012	FY 2012 vs	s. FY 2010	FY 2012 vs	. FY 2011
	Approp	Request	CR	Request	\$	%	\$	%
National Nuclear Security A	dministration							
Office of the								
Administrator	420,754	448,267	420,754	450,060	29,306	7.0%	1,793	0.4%
Weapons Activities	6,386,371	7,008,835	7,008,835	7,629,716	1,243,345	19.5%	620,881	8.9%
Defense Nuclear								
Nonproliferation	2,131,382	2,687,167	2,136,709	2,549,492	418,110	19.6%	-137,675	-5.1%
Naval Reactors	945,133	1,070,486	945,133	1,153,662	208,529	22.1%	83,176	7.8%
Subtotal, NNSA	9,883,640	11,214,755	10,511,431	11,782,930	1,899,290	19.2%	568,175	5.1%
Transfer of prior								
year balances	-10,000	0	0	0	0	0%	0	0%
Total, NNSA	9,873,640	11,214,755	10,511,431	11,782,930	1,899,290	19.2%	568,175	5.1%

#### Outyear Appropriation Summary NNSA Future-Years Nuclear Security Program (FYNSP)

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	(dollars in thousands)				
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
NNSA					
Office of the Administrator	450,060	442,992	441,242	441,522	440,591
Weapons Activities	7,629,716	7,948,673	8,418,480	8,683,538	8,905,597
Defense Nuclear Nonproliferation	2,549,492	2,771,068	2,907,934	2,983,984	3,038,395
Naval Reactors	1,153,662	1,232,278	1,289,917	1,474,200	1,569,800
Total, NNSA	11,782,930	12,395,011	13,057,573	13,583,244	13,954,383

#### Office of the Administrator

#### Overview Appropriation Summary by Program

ippropriation Summary by 110gram							
		(dollars in thousands)					
			FY 2011				
	FY 2010 Actual	FY 2011	Continuing	FY 2012			
	Appropriation	Request	Resolution	Request			
Office of the Administrator							
Office of the Administrator	418,074	448,267	410,754	450,060			
Congressionally Directed Projects	13,000	0	0	0			
Use of Prior Year Balances	-10,320	0	0	0			
Subtotal, Office of the Administrator	420,754	448,267	410,754	450,060			
Transfer of Prior Year Balances	-10,000	0	0	0			
Total, Office of the Administrator	410,754	448,267	410,754	450,060			

#### **Public Law Authorization:**

Energy and Water Development and Related Agencies Appropriations Act, 2010 (P.L. 111-85)

**Outyear Appropriation Summary by Program** 

v 11 1		0		
		(dollars in th	nousands)	
	FY 2013	FY 2014	FY 2015	FY 2016
Office of the Administrator	442,992	441,242	441,522	440,591

## Office of the Administrator

#### Congressionally Directed Projects Funding Profile by Subprogram

	(doll	(dollars in thousands)			
	FY 2010 Actual	FY 2011	FY 2012		
	Appropriation	Request	Request		
Congressionally Directed Projects	13,000	0	0		

#### **Weapons Activities**

#### Overview Appropriation Summary by Program

Appropriation Summary by Frogram						
		(dollars in th	ousands)			
	FY 2010 Actual	FY 2011	FY 2011	FY 2012		
	Appropriation	Request	CR	Request		
Weapons Activities						
Directed Stockpile Work	1,564,290	1,898,379		1,963,583		
Science Campaign	294,548	365,222		405,939		
Engineering Campaign	149,679	141,920		143,078		
Inertial Confinement Fusion Ignition and High Yield						
Campaign	457,486	481,548		476,274		
Advanced Simulation and Computing Campaign	566,069	615,748		628,945		
Readiness Campaign	106,744	112,092		142,491		
Readiness in Technical Base and Facilities	1,810,279	1,848,970		2,326,134		
Secure Transportation Asset	240,683	248,045		251,272		
Nuclear Counterrorism Incident Response	223,379	233,134		222,147		
Program	95,575	94,000		96,380		
Site Stewardship	63,308	105,478		104,002		
Defense Nuclear Security	769,823	719,954		722,857		
Cyber Security	123,338	124,345		126,614		
National Security Applications	0	20,000		20,000		
Congressionally Directed Projects	3,000	0		0		
Use/Recission of Prior Year Balances	-81,830	0		0		
Total, Weapons Activities	6,386,371	7,008,835	7,008,835	7,629,716		

#### **Public Law Authorization:**

National Defense Authorization Act for Fiscal Year 2010 (P.L. 111-84) Energy and Water Development and Related Agencies Appropriations Act, 2010 (P.L. 111-85)

National Nuclear Security Administration Act, (P.L. 106-65), as amended

Outyear Appropriation Summary by Program\*

		(dollars in thousands)				
	FY 2013	FY 2014	FY 2015	FY 2016		
Weapons Activities						
Directed Stockpile Work	2,111,439	2,327,859	2,529,992	2,630,707		
Science Campaign	418,216	416,284	394,315	404,097		
Engineering Campaign	168,418	165,898	159,449	158,693		
Inertial Confinement Fusion Ignition and High Yield						
Campaign	476,381	471,668	485,237	495,026		
Advanced Simulation and Computing Campaign	616,104	628,100	643,120	659,210		
Readiness Campaign	130,753	130,754	133,706	135,320		
Readiness in Technical Base and Facilities	2,484,259	2,742,504	2,729,657	2,734,890		
Secure Transportation Asset	249,456	252,869	261,521	267,773		
Nuclear Counterrorism Incident Response	219,737	232,680	236,045	242,205		
Facilities and Infrastructure Recapitalization Program	94,000	0	0	0		
Site Stewardship	104,699	175,370	207,488	212,706		
Defense Nuclear Security	729,795	729,173	756,110	814,967		
Cyber Security	125,416	125,321	126,898	130,003		
National Security Applications	20,000	20,000	20,000	20,000		
Total, Weapons Activities	7,948,673	8,418,480	8,683,538	8,905,597		

<sup>\*</sup> The annual totals include an allocation to NNSA from the Department of Defense's (DoD) Research, Development, Testing and Evaluation (RDT&E) account entitled: "NNSA Program Support." The amounts for Weapons Activities included from this DoD account are FY 2013, \$433.172 million; FY 2014, \$550.902 million; FY 2015, \$854.900 million; and FY 2016, \$637.933 million.

## **Directed Stockpile Work**

**Funding Profile by Subprogram** 

runuing 110inc	by Subprogram		
		ars in thousands	
	FY 2010 Actual	FY 2011	FY 2012
	Appropriation	Request	Request
Directed Stockpile Work			
Life Extension Programs			
B61 Life Extension Program	0	0	223,562
W76 Life Extension Program	231,888	249,463	257,035
Subtotal, Life Extension Programs	231,888	249,463	480,597
Stockpile Systems			
B61 Stockpile Systems	114,195	317,136	72,396
W62 Stockpile Systems	2	0	0
W76 Stockpile Systems	65,451	64,521	63,383
W78 Stockpile Systems	52,167	85,898	109,518
W80 Stockpile Systems	20,107	34,193	44,444
B83 Stockpile Systems	36,689	39,349	48,215
W87 Stockpile Systems	53,848	62,603	83,943
W88 Stockpile Systems	42,743	45,666	75,728
Subtotal, Stockpile Systems	385,202	649,366	497,627
Weapons Dismantlement and Disposition	95,786	58,025	56,770
Stockpile Services			
Production Support	300,037	309,761	354,502
Research & Development Support	37,071	38,582	30,264
Research & Development Certification and Safety	189,174	209,053	190,892
Management, Technology, and Production	183,223	193,811	198,700
Plutonium Sustainment	141,909	190,318	154,231
Subtotal, Stockpile Services	851,414	941,525	928,589
Total, Directed Stockpile Work	1,564,290	1,898,379	1,963,583

	(dollars in thousands)					
	FY 2013	FY 2014	FY 2015	FY 2016		
Directed Stockpile Work						
Life Extension Programs						
B61 Life Extension Program	279,206	320,894	396,869	426,415		
W76 Life Extension Program	255,000	255,000	255,000	260,099		
Subtotal, Life Extension Programs	534,206	575,894	651,869	686,514		
Stockpile Systems						
B61 Stockpile Systems	72,364	72,483	70,488	71,534		
W62 Stockpile Systems	0	0	0	(		
W76 Stockpile Systems	65,445	63,580	63,537	65,727		
W78 Stockpile Systems	151,207	329,354	333,978	316,507		
W80 Stockpile Systems	46,540	50,457	58,898	59,775		
B83 Stockpile Systems	57,947	72,516	65,941	54,663		
W87 Stockpile Systems	85,689	68,774	63,638	65,492		
W88 Stockpile Systems	105,582	78,602	163,626	226,060		
Subtotal, Stockpile Systems	584,774	735,766	820,106	859,758		
Weapons Dismantlement and Disposition	43,404	52,090	54,205	55,495		
Stockpile Services						
Production Support	319,805	320,614	332,371	341,203		
Research & Development Support	31,059	31,824	33,116	33,904		
Research & Development Certification and Safety	241,658	242,424	250,963	255,747		
Management, Technology, and Production	199,080	207,290	215,468	222,137		
Plutonium Sustainment	157,453	161,957	171,894	175,949		
Subtotal, Stockpile Services	949,055	964,109	1,003,812	1,028,940		
Total, Directed Stockpile Work	2,111,439	2,327,859	2,529,992	2,630,707		

## **Science Campaign**

**Funding Profile by Subprogram** 

	(dollars in thousands)				
	FY 2010 Actual	FY 2010 Actual FY 2011			
	Appropriation	Request	Request		
Science Campaign					
Advanced Certification	19,269	76,972	94,929		
Primary Assessment Technologies	82,838	85,723	86,055		
Dynamic Materials Properties	86,371	96,984	111,836		
Advanced Radiography	28,489	23,594	27,058		
Secondary Assessment Technologies	77,581	81,949	86,061		
Total, Science Campaign	294,548	365,222	405,939		

outjear runding rione of Susprogram						
		(dollars in thousands)				
	FY 2013	FY 2014	FY 2015	FY 2016		
Science Campaign						
Advanced Certification	97,229	103,271	82,000	84,174		
Primary Assessment Technologies	88,893	85,894	88,368	88,831		
Dynamic Materials Properties	114,980	114,170	106,398	114,620		
Advanced Radiography	26,816	26,528	27,421	26,473		
Secondary Assessment Technologies	90,298	86,421	90,128	89,999		
Total, Science Campaign	418,216	416,284	394,315	404,097		

## **Engineering Campaign**

**Funding Profile by Subprogram** 

, i	(dol	(dollars in thousands)				
	FY 2010 Actual	FY 2012				
	Appropriation	Request	Request			
Engineering Campaign						
Enhanced Surety	41,928	42,429	41,696			
Weapons Systems Engineering Assessment Technology	17,977	13,530	15,663			
Nuclear Survivability	20,980	19,786	19,545			
Enhanced Surveillance	68,794	66,175	66,174			
Total, Engineering Campaign	149,679	141,920	143,078			

outyear runding from by subprogram					
	(dollars in thousands)				
	FY 2013 FY 2014 FY 2015 FY				
Engineering Campaign					
Enhanced Surety	51,922	50,810	47,649	48,773	
Weapons Systems Engineering Assessment Technology	21,233	21,502	21,244	21,699	
Nuclear Survivability	24,371	25,691	26,079	26,318	
Enhanced Surveillance	70,892	67,895	64,477	61,903	
Total, Engineering Campaign	168,418	165,898	159,449	158,693	

#### **Inertial Confinement Fusion Ignition and High Yield Campaign**

**Funding Profile by Subprogram** 

	(dollars in thousands)			
	FY 2010 Actual FY 2011 FY 20			
	Appropriation	Request	Request	
Inertial Confinement Fusion Ignition and High Yield Campaign				
Ignition	106,575	109,506	109,888	
Support of Other Stockpile Programs	0	0	0	
Diagnostics, Cryogenics, and Experimental Support	72,144	102,649	86,259	
Pulsed Power Inertial Confinement Fusion	4,992	5,000	4,997	
Joint Program in High Energy Density Laboratory Plasmas	4,000	4,000	9,100	
Facility Operations and Target Production	269,775	260,393	266,030	
Total, Inertial Confinement Fusion Ignition and High Yield Campaign	457,486	481,548	476,274	

Outycar Funding Frome by Subprogram					
	(dollars in thousands)				
	FY 2013	FY 2014	FY 2015	FY 2016	
Inertial Confinement Fusion Ignition and High Yield					
Campaign					
Ignition	74,410	65,000	60,000	55,000	
Support of Other Stockpile Programs	35,590	45,000	50,000	55,000	
Diagnostics, Cryogenics, and Experimental Support	76,267	70,159	70,517	69,617	
Pulsed Power Inertial Confinement Fusion	5,000	5,000	5,000	5,000	
Joint Program in High Energy Density Laboratory Plasmas	9,500	9,500	9,500	9,500	
Facility Operations and Target Production	275,614	277,009	290,220	300,909	
Total, Inertial Confinement Fusion Ignition and High Yield					
Campaign	476,381	471,668	485,237	495,026	

<sup>\*</sup> Outyear funding profile does not include adjustments in response to the FY 2013 change in Self-Constructed Asset Pool (overhead rate at Lawrence Livermore National Laboratory). These adjustments will be reflected in the FY 2013 President's Budget.

## **Advanced Simulation and Computing Campaign**

**Funding Schedule by Subprogram** 

a garage ayang ag					
	(dol	(dollars in thousands)			
	FY 2010 Actual	FY 2010 Actual FY 2011 FY			
	Appropriation	Request	Request		
Advanced Simulation and Computing Campaign					
Integrated Codes	140,882	165,947	160,945		
Physics and Engineering Models	61,189	62,798	69,890		
Verification and Validation	50,882	54,781	57,073		
Computational Systems and Software Environment	157,466	175,833	181,178		
Facility Operations and User Support	155,650	156,389	159,859		
Total, Advanced Simulation and Computing Campaign	566,069	615,748	628,945		

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	(dollars in thousands)				
	FY 2013 FY 2014 FY 2015 FY 201				
Advanced Simulation and Computing Campaign					
Integrated Codes	160,170	163,287	167,194	171,377	
Physics and Engineering Models	69,567	70,922	72,617	74,434	
Verification and Validation	56,794	57,899	59,284	60,767	
Computational Systems and Software Environment	170,462	173,782	177,937	182,389	
Facility Operations and User Support	159,111	162,210	166,088	170,243	
Total, Advanced Simulation and Computing Campaign	616,104	628,100	643,120	659,210	

## **Readiness Campaign**

**Funding Profile by Subprogram** 

·	(do	(dollars in thousands)			
	FY 2010 Actual	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '			
	Appropriation	Request	Request		
Readiness Campaign					
Stockpile Readiness	5,670	18,941	0		
High Explosives and Weapon Operations	4,583	3,000	0		
Nonnuclear Readiness	19,625	21,864	65,000		
Tritium Readiness	68,245	50,187	77,491		
Advanced Design and Production Technologies	8,621	18,100	0		
Total, Readiness Campaign	106,744	112,092	142,491		

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		(dollars in thousands)			
	FY 2013	FY 2013 FY 2014 FY 2015 FY 20			
Readiness Campaign					
Stockpile Readiness	0	0	0	0	
High Explosives and Weapon Operations	0	0	0	0	
Nonnuclear Readiness	65,000	65,000	65,000	65,000	
Tritium Readiness	65,753	65,754	68,706	70,320	
Advanced Design and Production Technologies	0	0	0	0	
Total, Readiness Campaign	130,753	130,754	133,706	135,320	

#### **Readiness in Technical Base and Facilities**

**Funding Profile by Subprogram** 

Tunuing Frome by Subprogram						
	(doll	(dollars in thousands)				
	FY 2010 Actual	FY 2010 Actual FY 2011				
	Appropriation	Request	Request			
Readiness in Technical Base and Facilities						
Operations of Facilities						
Kansas City Plant	117,895	186,102	156,217			
Lawrence Livermore National Laboratory	86,083	80,106	83,990			
Los Alamos National Laboratory	338,479	318,464	318,526			
Nevada National Security Site	79,326	80,077	97,559			
Pantex	131,227	121,254	164,848			
Sandia National Laboratory	103,618	117,369	120,708			
Savannah River Site	131,129	92,722	97,767			
Y-12 National Security Complex	228,601	220,927	246,001			
Institutional Site Support	120,041	40,970	199,638			
Subtotal, Operations of Facilities	1,336,399	1,257,991	1,485,254			
Program Readiness	72,873	69,309	74,180			
Material Recycle and Recovery	69,224	70,429	85,939			
Containers	23,321	27,992	28,979			
Storage	24,558	24,233	31,272			
Subtotal, Operations and Maintenance	1,526,375	1,449,954	1,705,624			
Construction	283,904	399,016	620,510			
Total, Readiness in Technical Base and Facilities	1,810,279	1,848,970	2,326,134			

Outyear Funding Schedule by Subprogram

		(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016	
Readiness in Technical Base and Facilities					
Operations of Facilities	1,655,922	1,673,863	1,681,568	1,699,396	
Program Readiness	88,900	89,511	90,780	91,504	
Material Recycle and Recovery	104,940	102,782	105,021	106,642	
Containers	25,016	23,997	24,809	25,396	
Storage	32,347	31,872	33,647	34,208	
Subtotal, Operations and Maintenance	1,907,125	1,922,025	1,935,825	1,957,146	
Construction	577,134	820,479	793,832	777,744	
Readiness in Technical Base and Facilities	2,484,259	2,742,504	2,729,657	2,734,890	

## **Secure Transportation Asset**

#### Overview Funding Profile by Subprogram

O	V 1 0				
	(6	(dollars in thousands)			
	FY 2010 Actual	FY 2011	FY 2012		
	Appropriaton	Request	Request		
Secure Transportation Asset (STA)					
Operations and Equipment	144,542	149,018	149,274		
Program Direction	96,141	99,027	101,998		
Total, Secure Transportation Asset	240,683	248,045	251,272		

		(dollars in thousands)			
	FY 2013	FY 2013 FY 2014 FY 2015			
Operations and Equipment		-			
Operations and Equipment	141,560	142,270	146,865	150,561	
Program Direction	107,896	110,599	114,656	117,212	
Total, Operations and Equipment	249,456	252,869	261,521	267,773	

## **Secure Transportation Asset**

# Operations and Equipment Funding Profile by Subprogram

	(dollars in thousands)		
	FY 2010 Actual	FY 2011	FY 2012
	Appropriation	Request	Request
Operations and Equipment			
Mission Capacity	79,787	84,010	79,641
Security/Safety Capability	27,160	27,001	32,261
Infrastructure and C5 Systems	24,399	23,681	25,997
Program Management	13,196	14,326	11,375
Total, Operations and Equipment	144,542	149,018	149,274

		(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016	
Operations and Equipment					
Mission Capacity	69,715	69,033	73,476	72,771	
Security/Safety Capability	32,715	32,817	32,923	33,030	
Infrastructure and C5 Systems	26,583	27,621	27,411	31,444	
Program Management	12,547	12,799	13,055	13,316	
Total, Operations and Equipment	141,560	142,270	146,865	150,561	

## **Secure Transportation Asset**

## Program Direction Funding Profile by Subprogram

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etion 96,141 99,027 101,998
10,503 7,970 6,667
7,337 7,746 8,024
s 78,301 83,311 87,307
Appropriation Request Request
FY 2010 Actual FY 2011 FY 2012
(dollars in thousands)
(dollars in thousands)

Outyear randing frome by Subprogram						
		(dollars in thousands)				
	FY 2013	FY 2014	FY 2015	FY 2016		
Program Direction						
Salaries and Benefits	91,067	93,307	96,888	99,038		
Travel	8,301	8,550	8,806	8,984		
Other Related Expenses	8,528	8,742	8,962	9,190		
Total, Program Direction	107,896	110,599	114,656	117,212		
Total, Full Time Equivalents	649	649	649	649		

## **Nuclear Counterterrorism Incident Response**

**Funding by Subprogram** 

	(dollars in thousands)				
	FY 2010 Actual	FY 2010 Actual FY 2011			
	Appropriation	Request	Request		
Nuclear Counterterrorism Incident Response (Homeland Security)*					
Emergency Response (Homeland Security)*	140,481	134,092	137,159		
National Technical Nuclear Forensics (Homeland Security)*	10,227	11,698	11,589		
Emergency Management (Homeland Security)*	7,726	7,494	7,153		
Operations Support (Homeland Security)*	8,536	8,675	8,691		
International Emergency Management and Cooperation	7,181	7,139	7,129		
Nuclear Counterterrorism (Homeland Security)*	49,228	64,036	50,426		
Total, Nuclear Counterterrorism Incident Response	223,379	233,134	222,147		

·	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Nuclear Counterterrorism Incident Response				
Emergency Response (Homeland Security)*	136,918	138,440	140,098	142,816
National Technical Nuclear Forensics (Homeland Security)*	11,694	11,577	11,828	12,274
Emergency Management (Homeland Security)*	6,629	6,506	6,694	6,776
Operations Support (Homeland Security)*	8,799	8,749	9,000	9,110
International Emergency Management and Cooperation	7,139	7,032	7,276	7,664
Nuclear Counterterrorism (Homeland Security)*	48,558	60,376	61,149	63,565
Total, Nuclear Counterterrorism Incident Response	219,737	232,680	236,045	242,205

<sup>\*</sup> Office of Management and Budget (OMB) Homeland Security designation.

## **Facilities and Infrastructure Recapitalization Program**

**Funding Profile by Subprogram** 

	(dollars in thousands)					
	FY 2010 Actual	FY 2012				
	Appropriation	Request	Request			
Facilities and Infrastructure Recapitalization Program						
Operations and Maintenance (O&M)						
Recapitalization	70,483	79,600	81,980			
Infrastructure Planning	6,153	9,400	9,400			
Facility Disposition	8,976	5,000	5,000			
Subtotal, Operations and Maintenance (O&M)	85,612	94,000	96,380			
Construction	9,963	0	0			
Total, Facilities and Infrastructure Recapitalization Program	95,575	94,000	96,380			

Outyear Funding Frome by Subprogram					
	(dollars in thousands)				
	FY 2013	FY 2014	FY 2015	FY 2016	
Facilities and Infrastructure Recapitalization Program					
Operations and Maintenance (O&M)					
Recapitalization	86,600	0	0	0	
Infrastructure Planning	2,400	0	0	0	
Facility Disposition	5,000	0	0	0	
Subtotal, Operations and Maintenance (O&M)	94,000	0	0	0	
Construction	0	0	0	0	
Total, Facilities and Infrastructure Recapitalization Program	94,000	0	0	0	

## Site Stewardship

#### **Funding Profile by Subprogram**

	(dollars in thousands)				
	FY 2010 Actual FY 2011 FY 201				
	Appropriation	Request	Request		
Site Stewardship					
Operations and Maintenance	63,308	90,478	104,002		
Construction	0	15,000	0		
Total, Site Stewardship	63,308	105,478	104,002		

## Outyear and Over Target Funding Profile by Subprogram

·				
	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Site Stewardship				
Operations and Maintenance	102,458	175,370	192,488	197,706
Construction	2,241	0	15,000	15,000
Total, Site Stewardship	104,699	175,370	207,488	212,706

## Safeguards and Security

**Funding Profile by Subprogram** 

	1 0				
	(doll	(dollars in thousands)			
	FY 2010 Actual	FY 2010 Actual FY 2011 FY			
	Appropriations	Request	Request		
Safeguards and Security (S&S)					
Defense Nuclear Security (Homeland Security)					
Operations and Maintenance	720,823	667,954	711,105		
Construction	49,000	52,000	11,752		
Total, Defense Nuclear Security	769,823	719,954	722,857		
Cyber Security (Homeland Security)	123,338	124,345	126,614		
Total, Safeguards and Security	893,161	844,299	849,471		

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		(dollars in thousands)				
	FY 2013	FY 2014	FY 2015	FY 2016		
Safeguards and Security (S&S)						
Defense Nuclear Security (Homeland Security)						
Operations and Maintenance	729,795	729,173	756,110	814,967		
Construction	0	0	0	0		
Total, Defense Nuclear Security	729,795	729,173	756,110	814,967		
Cyber Security (Homeland Security)	125,416	125,321	126,898	130,003		
Total, Safeguards and Security	855,211	854,494	883,008	944,970		

## **Defense Nuclear Security**

**Funding Profile by Subprogram** 

·	(do	llars in thousands	3)
	FY 2010 Actual	FY 2011	FY 2012
	Appropration	Request	Request
Defense Nuclear Security			
Operations and Maintenance (Homeland Security)			
Protective Forces	453,779	414,166	418,758
Physical Security Systems	74,000	73,794	107,636
Information Security	25,300	25,943	30,117
Personnel Security	30,600	30,913	37,285
Materials Control and Accountability	35,200	35,602	34,592
Program Management	83,944	80,311	77,920
Technology Deployment, Physical Security	8,000	7,225	4,797
Graded Security Protection Policy (formerly DBT)	10,000	0	0
Total, Operations and Maintenance (Homeland Security)	720,823	667,954	711,105
Construction (Homeland Security)	49,000	52,000	11,752
Total, Defense Nuclear Security	769,823	719,954	722,857

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	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Defense Nuclear Security				
Operations and Maintenance (Homeland Security)				
Protective Forces	405,145	402,755	417,474	451,148
Physical Security Systems	129,491	130,266	132,872	140,537
Information Security	29,540	30,148	31,406	33,806
Personnel Security	39,063	39,375	39,862	41,205
Materials Control and Accountability	33,206	33,502	34,831	37,412
Program Management	86,706	86,363	92,631	103,527
Technology Deployment, Physical Security	6,644	6,764	7,034	7,332
Total, Operations and Maintenance (Homeland Security)	729,795	729,173	756,110	814,967
Construction (Homeland Security)	0	0	0	0
Total, Defense Nuclear Security	729,795	729,173	756,110	814,967

## **Cyber Security**

#### **Funding Profile by Subprogram**

	(dol	(dollars in thousands)				
	FY 2010 Actual	FY 2010 Actual FY 2011 FY Appropriation Request Rec				
	Appropriation					
Cyber Security (Homeland Security)						
Infrastructure Program	99,838	97,849	107,618			
Enterprise Secure Computing	21,500	21,500	14,000			
Technology Application Development	2,000	4,996	4,996			
Total, Cyber Security (Homeland Security)	123,338	124,345	126,614			

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		(dollars in thousands)			
	FY 2013 FY 2014 FY 2015 FY 201			FY 2016	
Cyber Security (Homeland Security)					
Infrastructure Program	106,826	106,711	108,193	111,233	
Enterprise Secure Computing	14,000	14,000	14,000	14,000	
Technology Application Development	4,590	4,610	4,705	4,770	
Total, Cyber Security (Homeland Security)	125,416	125,321	126,898	130,003	

## **National Security Applications**

## **Funding Profile by Subprogram**

•				
	(dollars in thousands)			
	FY 2010 Actual FY 2011 FY 2012			
	Appropriation Request Reques			
Operations and Maintenance	0	20,000	20,000	
Total, National Security Applications	0	20,000	20,000	

#### **Outyear Funding Profile by Subprogram**

	(dollars in thousands)					
ſ	FY 2013 FY 2014 FY 2015 FY 2016					
	20.000	20.000	20.000	20.000		

**Total, National Security Applications** 

## **Weapons Activities**

## **Congressionally Directed Projects Funding Profile by Subprogram**

	(do	(dollars in thousands)			
	FY 2010 Actual FY 2011 FY 2012				
	Appropriation	Request	Request		
<b>Congressionally Directed Projects</b>	3,000	0	0		

#### **Defense Nuclear Nonproliferation**

#### Overview Appropriation Summary by Program

	(dollars in thousands)				
	FY 2010 Actual	FY 2011	FY 2011	FY 2012	
	Appropriation	Request	CR	Request	
Defense Nuclear Nonproliferation					
Nonproliferation and Verification Research					
and Development	311,274	351,568		417,598	
Nonproliferation and International Security	187,202	155,930		161,833	
International Nuclear Materials Protection					
and Cooperation <sup>a</sup>	572,749	590,118		571,639	
Elimination of Weapons-Grade Plutonium					
Production	24,507	0		0	
Fissile Materials Disposition	701,900	1,030,713		890,153	
Global Threat Reduction Initiative	333,500	558,838		508,269	
Congressional Directed Projects	250	0		0	
Total, Defense Nuclear Nonproliferation	2,131,382	2,687,167	2,136,709	2,549,492	

#### **Public Law Authorization:**

Energy and Water Development and Related Agencies Appropriations Act, 2010 (P.L. 111-85) National Nuclear Security Administration Act, (P.L. 106-65), as amended National Defense Authorization Act for Fiscal Year 2010 (P.L. 111-84)

**Outyear Appropriation Summary by Program** 

	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Defense Nuclear Nonproliferation				
Nonproliferation and Verification Research and				
Development	479,191	506,243	503,328	519,455
Nonproliferation and International Security	163,000	168,000	171,999	174,999
International Nuclear Materials Protection and				
Cooperation	519,000	633,000	656,000	531,723
Fissile Materials Disposition	1,112,877	963,691	991,657	1,071,940
Global Threat Reduction Initiative	497,000	637,000	661,000	740,278
Total, Defense Nuclear Nonproliferation	2,771,068	2,907,934	2,983,984	3,038,395

## Nonproliferation and Verification Research and Development

**Funding Profile by Subprogram** 

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~				
	(dollars in thousands)			
	FY 2010 Actual FY 2011 FY 2			
	Appropriation	Request	Request	
Nonproliferation and Verification R&D				
Proliferation Detection (PD)	175,813	225,004	218,350	
Homeland Security-Related Proliferation Detection [Non-Add]	[50,000]	[50,000]	[50,000]	
Nuclear Detonation Detection (NDD)	135,461	126,564	127,800	
University of California Pension Payments and				
Contractor Pension Cost	0	0	71,448	
Total, Nonproliferation and Verification R&D	311,274	351,568	417,598	

#### **Outyear Funding Profile by Subprogram**

(dollars in thousands)

	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Nonproliferation and Verification R&D	-			
Proliferation Detection (PD)	222,623	227,838	228,517	242,357
Homeland Security-Related Proliferation Detection				
[Non-Add]	[50,000]	[50,000]	[50,000]	[50,000]
Nuclear Detonation Detection (NDD)	139,568	145,405	145,811	154,098
University of California Pension Payments and Contractor				
Pension Cost	117,000	133,000	129,000	123,000
Total, Nonproliferation and Verification R&D	479,191	506,243	503,328	519,455

#### Nonproliferation and International Security

**Funding Profile by Subprogram\*** 

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	(do	(dollars in thousands)			
	FY 2010 Actual	FY 2010 Actual FY 2011 FY 2012			
	Appropriation	Request	Request		
Nonproliferation and International Security					
Dismantlement and Transparency	72,763	49,207	0		
Global Security Engagement and Cooperation	50,708	47,289	0		
International Regimes and Agreements	42,703	39,824	0		
Treaties and Agreements	21,028	19,610	0		
Nuclear Safeguards and Security	0	0	53,925		
Nuclear Controls	0	0	48,496		
Nuclear Verification	0	0	46,995		
Nonproliferation Policy	0	0	12,417		
Total, Nonproliferation and International Security	187,202 155,930 161,8				

<sup>\*</sup> The Nonproliferation and International Security Program is proposing a budget structure change staring in FY 2012. The structure change creates a more efficient and clearer program organization with activities aligned along functional lines that reflect United States nonproliferation priorities and initiatives. The new structure depicts more clearly the alignment of people, technology, and resources to meet and implement nuclear nonproliferation objectives.

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		(dollars in thousands)			
	FY 2013	FY 2013 FY 2014 FY 2015 FY 201			
Nonproliferation and International Security					
Nuclear Safeguards and Security	56,038	57,757	59,132	60,163	
Nuclear Controls	50,396	51,942	53,178	54,106	
Nuclear Verification	43,662	45,001	46,073	46,876	
Nonproliferation Policy	12,904	13,300	13,616	13,854	
Total, Nonproliferation and International Security	163,000	168,000	171,999	174,999	

## **International Nuclear Materials Protection and Cooperation**

**Funding Profile by Subprogram** 

Cooperation	572,749	590,118	571,639	
Total, International Nuclear Materials Protection and				
International Contributions <sup>a</sup>	699	0	0	
Second Line of Defense	272,446	265,297	263,784	
National Programs and Sustainability	68,469	60,928	60,928	
Material Consolidation and Conversion	13,611	13,867	14,306	
Civilian Nuclear Sites	63,481	59,027	59,117	
Rosatom Weapons Complex	71,517	105,318	80,735	
Strategic Rocket Forces/12 <sup>th</sup> Main Directorate	48,646	51,359	59,105	
Navy Complex	33,880	34,322	33,664	
International Nuclear Materials Protection and Cooperation				
	Appropriation	Request	Request	
	FY 2010 Actual	FY 2011	FY 2012	
	(dollars in thousands)			

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	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
International Nuclear Materials Protection and Cooperation				
Navy Complex	8,146	3,900	3,750	3,600
Strategic Rocket Forces/12 <sup>th</sup> Main Directorate	42,014	6,150	5,900	5,650
Rosatom Weapons Complex	51,560	46,061	39,442	38,876
Civilian Nuclear Sites	48,292	44,249	46,996	46,996
Material Consolidation and Conversion	64,627	64,627	66,433	50,000
National Programs and Sustainability	39,006	39,006	41,734	39,006
Second Line of Defense	265,355	429,007	451,745	347,595
Total, International Nuclear Materials Protection and				
Cooperation	519,000	633,000	656,000	531,723

## **Elimination of Weapons-Grade Plutonium Production**

**Funding Profile by Subprogram** 

,	(dollars in thousands)			
	FY 2010 Actual FY 2011 FY			
	Appropriation Request Rec			
Elimination of Weapons-Grade Plutonium Production (EWGPP)				
Zheleznogorsk Plutonium Production Elimination (ZPPEP)	22,507	0	0	
Crosscutting and Technical Support Activities	2,000	0	0	
Total, Elimination of Weapons-Grade Plutonium Production				
(EWGPP)	24,507	0	0	
Cancellation of unobligated balances			-30,000	

	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Elimination of Weapons-Grade Plutonium Production	0	0	0	0

## Fissile Materials Disposition

**Funding Profile by Subprogram** 

	2 4 2 P 1 2 P 1 4 1 1 1				
	(dollars	(dollars in thousands)			
	FY 2010 Current	FY 2011	FY 2012		
	Appropriation	Request	Request		
Fissile Materials Disposition (FMD)					
U.S. Surplus Fissile Materials Disposition					
Operations and Maintenance (O&M)					
U.S. Plutonium Disposition	91,659	278,940	274,790		
U.S. Uranium Disposition	34,691	25,985	26,435		
Supporting Activities	312	0	0		
Subtotal, O&M	126,662	304,925	301,225		
Construction	574,238	612,788	578,754		
Total, U.S. Surplus FMD	700,900	917,713	879,979		
Russian Surplus FMD					
Russian Materials Disposition	1,000	113,000	10,174		
Total, Fissile Materials Disposition	701,900	1,030,713	890,153		

Outyear randing frome by Subprogram					
		(dollars in thousands)			
	FY 2013	FY 2013 FY 2014 FY 2015 FY 2			
Fissile Materials Disposition					
U.S. Surplus Fissile Materials Disposition (O&M)	422,575	480,280	531,134	686,135	
Construction	637,802	430,661	402,773	354,805	
Russian Surplus Fissile Materials Disposition	52,500	52,750	57,750	31,000	
Total, Fissile Materials Disposition	1,112,877	963,691	991,657	1,071,940	

## **Global Threat Reduction Initiative (GTRI)**

**Funding Profile by Subprogram** 

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	(dollars in thousands)			
	FY 2010 Actual	FY 2011	FY 2012	
	Appropriation	Request	Request	
Global Threat Reduction Initiative				
Highly Enriched Uranium (HEU) Reactor Conversion	102,772	119,000	148,269	
Nuclear and Radiological Material Removal				
Russian-Origin Nuclear Material Removal	94,167	145,191	147,000	
U.SOrigin Nuclear Material Removal	9,889	16,500	9,000	
Gap Nuclear Material Removal	9,111	108,000	56,000	
Emerging Threats Nuclear Material Removal	5,556	16,000	5,000	
International Radiological Material Removal	8,333	45,000	20,000	
Domestic Radiological Material Removal (Homeland Security)*	17,778	25,000	20,000	
Subtotal, Nuclear and Radiological Material Removal	144,834	355,691	257,000	
Nuclear and Radiological Material Protection				
BN-350 Nuclear Material Protection	9,109	2,000	2,000	
International Material Protection	41,463	57,000	50,000	
Domestic Material Protection (Homeland Security)*	35,322	25,147	51,000	
Subtotal, Nuclear and Radiological Material	33,322	23,147	31,000	
Protection	85,894	84,147	103,000	
Total, Global Threat Reduction Initiative	333,500	558,838	508,269	

<sup>\*</sup> Office of Management and Budget (OMB) Homeland Security designation.

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	(dollars in thousands)			
	FY 2013	FY 2014	FY 2015	FY 2016
Global Threat Reduction Initiative				
HEU Reactor Conversion	175,000	230,000	254,000	269,000
Nuclear and Radiological Material Removal				
Russian-Origin Nuclear Material Removal	112,000	110,000	105,000	100,000
U.SOrigin Nuclear Material Removal	8,000	3,000	3,000	3,000
Gap Nuclear Material Removal	56,000	20,000	10,000	5,000
Emerging Threats Nuclear Material Removal	5,000	5,000	5,000	5,000
International Radiological Material Removal	20,000	20,000	25,000	25,000
Domestic Radiological Material Removal (Homeland Security)*	20,000	20,000	28,000	29,000
Subtotal, Nuclear and Radiological Material Removal	221,000	178,000	176,000	167,000
Nuclear and Radiological Material Protection				
International Material Protection	50,000	86,000	87,000	91,000
Domestic Material Protection (Homeland Security)*	51,000	143,000	144,000	213,278
Subtotal, Nuclear and Radiological Material Protection	101,000	229,000	231,000	304,278
Total, Global Threat Reduction Initiative	497,000	637,000	661,000	740,278

<sup>\*</sup> Office of Management and Budget (OMB) Homeland Security designation.

## **Defense Nuclear Nonproliferation**

## Congressionally Directed Projects Funding Profile by Subprogram

_	(dollars in thousands)				
	FY 2010 Actual	FY 2011	FY 2012		
	Appropriation	Request	Request		
Congressionally Directed Projects	250	0	0		

#### **Naval Reactors**

#### Overview Appropriation Summary by Program

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	(dollar	(dollars in thousands)			
	FY 2010 Actual	FY 2010 Actual FY 2011			
	Appropriations	Request	Request*		
Naval Reactors Development					
Operations and Maintenance (O&M)	877,533	997,886	1,069,262		
Program Direction	36,800	40,000	44,500		
Construction	30,800	32,600	39,900		
Total, Naval Reactors Development	945,133	1,070,486	1,153,662		
* FY 2012 includes \$27,800 DoD support for the Expended Core Facility M-290 Receiving Discharge Station line-item					
construction project.					

#### **Public Law Authorizations:**

P.L. 83-703, "Atomic Energy Act of 1954"

"Executive Order 12344 (42 U.S.C. 7158), "Naval Nuclear Propulsion Program"

P.L. 107-107, "National Defense Authorizations Act of 2002", Title 32, "National Nuclear Security Administration"

John Warner National Defense Authorization Act for FY 2007, (P.L. 109-364)

FY 2008 Consolidated Appropriations Act (P.L. 110-161)

National Nuclear Security Administration Act, P.L. 106-65), as amended

FY 2009 Consolidated Appropriations Act (P.L. 111-8)

FY 2010 Energy and Water Related Agencies Appropriation Act (P.L. 111-85)

#### Outyear Appropriation Summary by Program\*

(dollars in thousands)

	FY 2013	FY 2014	FY 2015	FY 2016
Naval Reactors Development				<del>.</del>
Operations and Maintenance	1,093,038	1,181,847	1,234,610	1,245,900
Program Direction	47,040	49,670	52,390	54,200
Construction	92,200	58,400	187,200	269,700
<b>Total, Naval Reactors Development</b>	1,232,278	1,289,917	1,474,200	1,569,800

<sup>\*</sup> The annual totals include an allocation to NNSA from the Department of Defense's (DoD) Research, Development, Testing and Evaluation (RDT&E) account entitled: "NNSA Program Support." The amounts included for Naval Reactors from this DoD account are FY 2013, \$5.7 million; FY 2014 \$1.7 million; and FY 2015 \$0.4 million.